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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,374	09/29/2000	Ernest H. Zerennner	POPT-0004	1828
7590 12/01/2004				
John E. McGlynn, Esquire Woodcock Washburn Kurtz MacKiewicz & Norris LLP One Liberty Place-46th Floor Philadelphia, PA 19103		EXAMINER FELTEN, DANIEL S		
		ART UNIT 3624 PAPER NUMBER		
		DATE MAILED: 12/01/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/676,374

Applicant(s)

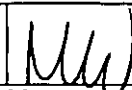
ERNEST H. ZERENNER

Examiner

Daniel S Felten

Art Unit

3624



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Examiner's Note***

The Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations with the individual claims, other passages and figures apply as well. It is requested from the Applicant in preparing a response to consider the entire references in full as well as the context of all references passages as potentially teaching all or part of the claimed inventions.

***Status of Claims***

1. Receipt of the amendment filed August 26, 2004 with currently amended claim 150 and new claim 154 is acknowledged. Claims 1-28 are pending in the application and are presented to be examined upon their merits.

***Response to Arguments***

2. Applicant's the Remarks/Traversal of the Restriction/Elections made in the August 26, 2004 are valid and thus the Election Restriction of claims 1-28 are withdrawn. However, new rejections have been provided below.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter. Claim 1

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lacks technical basis because the body of the claim presents limitations that do not show what part of the method is performed by the computer system ( data processing device or some other piece of technology), thus if the invention in the body of the claim is not tied to technological art, environment, or machine the claim is considered non-statutory [see Ex Parte bowman, 61 USPQ2d 1665, 1671, (BD Pat. App & Bowman, Inter 2001) (unpub). See Also MPEP 2106 IV 2(b). The recitation of a computer system in the preamble does not sufficiently provide technical basis for the claim because it is not shown what steps the computer system performs the method in the body of the claim.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over AIQ Systems ([www. aiqsystems.com](http://www.aiqsystems.com))

**Re claim 1:**

AIQ discloses a method of processing financial instrument data to identify stock option spreads, in a computer system, comprising: receiving financial data from at least one data source; processing the financial data to derive values for a set of searchable parameters corresponding to stock option spreads; receiving user defined search criteria for searching the searchable parameters corresponding to the stock option spreads; searching the values derived for the set of searchable parameters for values having the user defined search criteria; and identifying a set of option spreads corresponding to values for the set of searchable parameters matching the user defined search criteria (see Options Expert Tour/ Trading Expert Pro Tour).

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AIQ does not directly disclose processing the financial data to derive values for a set of searchable parameters, however, does disclose that real-time dynamic *prices* are made available (see Options Expert Tour –Automatic Options Lists). It would have been obvious for an artisan at the time of the invention to recognize that the real-time price is equivalent to the values that may be derived from searchable parameters and/or criteria because an artisan at the time of the invention would be motivated to process the financial data to derive prices for a set of searchable parameters corresponding to stock options spreads so as to select the most desirable (or most profitable) option for the user. Thus such a modification would have been an obvious expedient well within the ordinary skill in the art.

**Re claim 2:**

AIQ discloses wherein said step of processing the financial data to derive values for a set of searchable parameters corresponding to stock option spreads comprises processing the financial data to derive values for at least one of the following: bull-put spreads; bear call spreads; collar spreads; strangle spreads; butterfly spreads; straddle spreads; and calendar spreads (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 3:**

AIQ discloses wherein said step of processing the financial data to derive values for a set of searchable parameters corresponding to stock option spreads comprises the step of processing the financial data to derive values for at least one of the following

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searchable parameters: Black-Scholes ratio; option volume percentage; implied volatility', percentage to double', industry groupings; recommended listings; and percentage return on an option spread (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 4:**

AIQ discloses transmitting to a user a series of questions regarding investment preferences; receiving responses to said series of questions; and formulating from said responses, search criteria for searching the searchable Parameters (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 5:**

AIQ discloses further comprising the steps of: receiving a request to execute one of the set of option spreads; and forwarding said request to execute one of the set of option spreads to a brokerage computer system operable to execute trades on stocks and stock options, wherein said request entails executing trades on a plurality of stock options (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 6:**

AIQ discloses wherein said step of identifying a set of option spreads comprises formatting a listing of option strategies corresponding to values derived for said set of

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searchable parameters matching the user defined search criteria (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 7:**

AIQ discloses wherein said step of formatting a listing of option spreads comprises the step of formatting a chain of option spreads, said chain of option spreads including a list of option spreads having options expiring in the same month (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 8:**

AIQ discloses a method for formulating searches of financial instruments in a transmitting to a user a series of questions regarding investment preferences, receiving responses to said series of questions;  
formulating from said responses, search criteria; and executing a search of a searchable database of financial instruments using said search criteria (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 9:**

AIQ discloses a method for processing trades in a computer system of financial instrument strategies including multiple financial instruments, comprising:  
receiving a request to execute a trade of a financial instrument strategy;

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formulating a trade request defining trades to be executed on a plurality of financial



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instruments included in the financial instrument strategy, and routing the trade request to a brokerage (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 10:**

AIQ discloses a system for processing financial instrument data to identify stock option spreads, comprising:

- a communication device for receiving data from external systems;
- a processing device in communication with said communication device, wherein said processing device is programmed to perform the following:
  - receive financial data via said communication device from at least one data source;
  - process the financial data to derive values for a set of searchable parameters corresponding to stock option spreads;
  - receive user defined search criteria for searching the searchable parameters corresponding to the stock option spreads;
  - search the values derived for the set of searchable parameters for values having the user defined search criteria; and
  - identified a set of option spreads corresponding to values for the set of searchable parameters matching the user desired search criteria (see AIQ's Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 11:**

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AIQ discloses wherein said step of receiving financial data from at least one data source comprises the step of receiving for at least one stock option, at least one of the following option symbol; underlying stock symbol; stock as price; option expiration date; option strike price; option bid; option volume; open interest; p/e ratio', average recommendation; the number of common shares outstanding; beta; company name; and Zack's indicator (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 12:**

AIQ discloses wherein said step of processing the financial data to derive values for a set of searchable parameters corresponding to stock option spreads further comprises the step of receiving at least one of the following: percentage if not assigned; percentage if assigned; percentage earnings per share growth; percentage range; stock percentage volume; percentage yield; delta; and historical price volatility (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 13:**

AIQ discloses the method of claim, wherein said step of processing the financial data to derive values for a set of searchable parameters corresponding to stock option spreads comprises the step of processing the financial data to derive the percentage return on a stock option spread (see Options Expert Tour/ Trading Expert Pro Tour).

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**Re claim 14:**

AIQ further comprising the step of determining if the user defined search criteria are operable for searching the searchable parameters (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 15:**

AIQ discloses wherein the step of receiving user defined search criteria for searching the searchable parameters comprises the step of receiving search criteria for at least one of the following: percentage return; net credit', stock price of underlying stock; percentage earnings per share growth; price to earnings ratio; percentage of range between the year's high and low stock price; average broker recommendation, percentage change in volume; number of shares outstanding; percent yield; beta; and volatility (see Options Expert Tour/ Trading Expert Pro Tour).

**Re claim 16:**

AIQ discloses wherein said step of receiving user defined search criteria for searching the searchable parameters further comprises the step of receiving search criteria identifying an industry segment (see Options Expert Tour/ Trading Expert Pro Tour).

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**Re claim 17:**

AIQ discloses wherein said step of receiving user defined search criteria for searching the searchable parameters further comprises the step of receiving search criteria identifying a recommended list (see Options Expert/Trading Expert Pro Tour)

**Re claim 18:**

AIQ discloses wherein said step of receiving search criteria identifying a recommended list of receiving search criteria identifying a recommended list comprises the step of receiving search criteria identifying a user defined customized list (see Options Expert/Trading Expert Pro Tour).

**Re claim 19:**

AIQ discloses further comprising the step of receiving sorting criteria for sorting stock option (see Options Expert/Trading Expert Pro Tour).

**Re claim 20:**

AIQ discloses receiving sorting criteria for sorting stock option spreads comprises the step of receiving sorting criteria for sorting stock options spreads by at least criteria

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identifying sorting stock option spreads by at least one of the following: percent return; net credit; stock price; option bid price; option volume; open interest; percentage option volume; company name; percentage earnings per share; price to earnings ratio; percentage range; average brokerage recommendation; percentage volume; shares outstanding; expiration date; percentage yield', beta volatility; Black-Scholes ratio; delta; implied volatility and percent to double (see Options Expert/Trading Expert Pro Tour)

**Re claim 21:**

AIQ discloses wherein said step of receiving sorting criteria further comprises the step of receiving criteria identifying sorting on options coming due in a particular month (see Options Expert/Trading Expert Pro Tour)

**Re claim 22:**

AIQ discloses wherein said step of receiving sorting criteria further comprises the step of receiving criteria identifying sorting results from high-to-low or low-to-high (see Options Expert/Trading Expert Pro Tour)

**Re claim 23:**

AIQ discloses wherein said step of receiving user defined search criteria comprises the step of receiving criteria identifying searching for stock option spreads in-the-money or stock option spreads out-of-the-money (see Options Expert/Trading Expert Pro Tour)

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**Re claim 24:**

AIQ discloses wherein said step of identifying a set of option spreads corresponding to values for the set of searchable parameters matching the user defined search criteria comprises the step of compiling a list of stock option spreads, wherein the list identifies for each stock option spread at least one of the following: stock symbol, stock price; option symbol; strike price; bid; ask; percentage return on spread; net credit; break even; volatility; and company name (see Options Expert/Trading Expert Pro Tour).

**Re claim 25:**

AIQ discloses a further comprising the step of saving user desired search criteria for searching the searchable parameters corresponding to the stock option spreads (see Options Expert/Trading Expert Pro Tour)

**Re claim 26:**

AIQ discloses further comprising, in response to a user request, the step of searching the values derived for the set of searchable parameters for values having the saved user desired search criteria (see Options Expert/Trading Expert Pro Tour).

**Re claim 27:**

AIQ discloses in a computer system programmed to manage a portfolio of stocks or stock options, a method of providing alerts comprising the steps of:

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detecting an event associated with a portfolio of stocks or stock options;

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formatting a suggested action to be taken with respect to the portfolio in response to the event; and presenting the suggested action to a user of the system (see Options Expert/Trading Expert Pro Tour).

**Re claim 28:**

AIQ discloses wherein said step of detecting an event associated with a portfolio comprises the step of detecting a value for at least one of the following: percent profit; day of the year; percentage loss; percent change in value; amount of premium relative to the Black-Scholes value; and actual price relative to the strike price (see Options Expert/Trading Expert Pro Tour).

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### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S Felten whose telephone number is (703) 305-0724. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel S Felten  
Examiner  
Art Unit 3624



DSF  
November 22, 2004

VINCENT MILLIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3800